



American Water Works  
Association

# **AWWA Utility Quality Programs: Performance Improvement Tools Built for Utilities by Utilities**

Risk Management Strategies for Drinking  
Water Utilities -- May 2004 – Ann Arbor, MI

# AWWA Utility Quality Programs

Good afternoon!

Three items to discuss:

- What are the AWWA utility quality programs
- How have they been used and what have we learned
- Some keys to participation in these programs

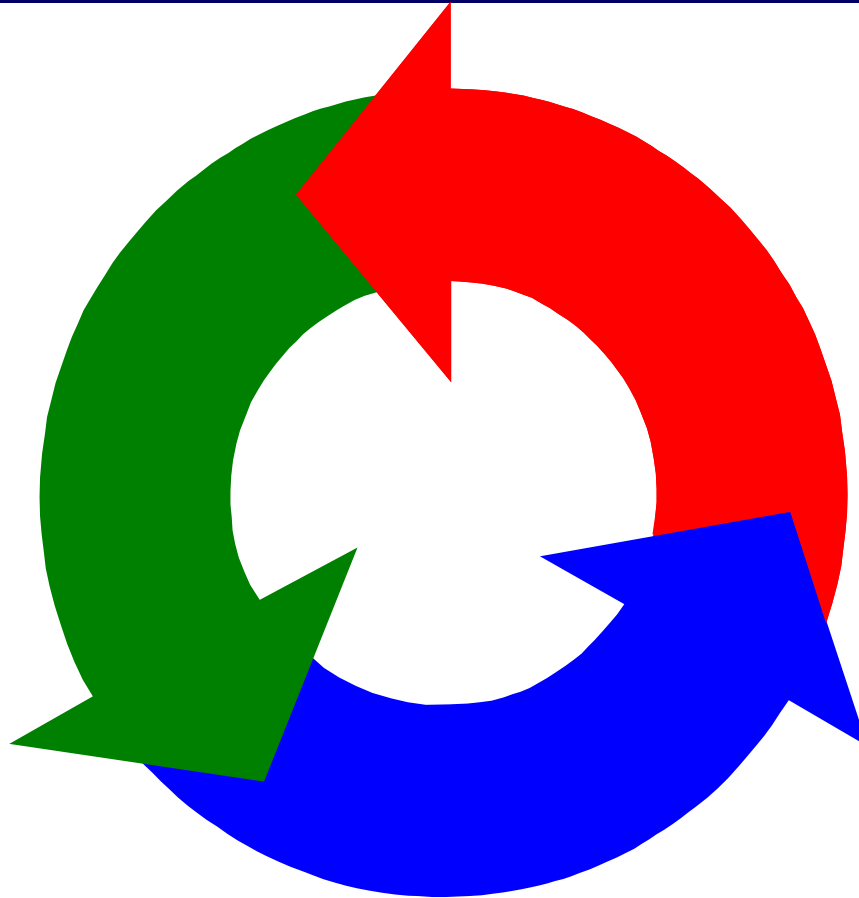
# Why Utility Quality Programs?



# Why Utility Quality Programs?

- Protection of public health and the environment
- Responsible stewardship and optimization of resources – natural, human, financial
- Consumer confidence and public support

**Based on the principles of continuous quality**



# AWWA Utility Quality Programs

## **Partnership for Safe Water** (six organizations)

- Water treatment plant optimization
- International Water Treatment Alliance

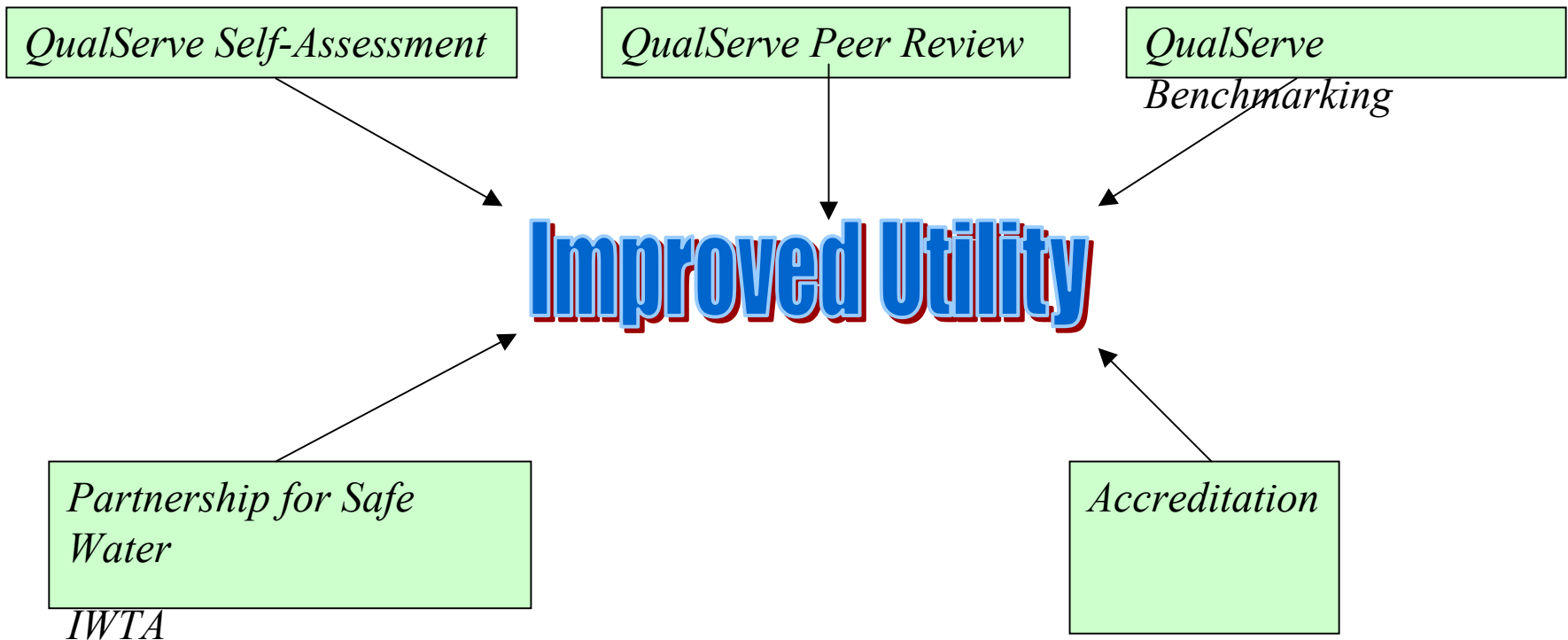
## **Accreditation**

- Build standards and conduct pilot test
- Support OWWA in Ontario

## **QualServe** (joint with WEF)

- Self-Assessment
- Peer Review
- Benchmarking

# Tools for Utility Quality Improvement



## **Development of standards**

- Distribution System Operation
- Water Treatment
- Source Water Protection

## **Support Ontario Water Works Association**

- Accreditation required post Walkerton report
- Assisting OWWA in role as key stakeholder
- All quality programs may be part of mix

# Accreditation Efforts to Date

- **Development of Utility Quality Performance Standards underway with three standards**
  - Distribution Systems Operation and Management
  - Water Treatment Plant Operation and Management
  - Source Water Protection
- **Ontario Ministry of the Environment Accreditation Program**

# Partnership for Safe Water

- AWWA partners with 5 other organizations
- Focus on optimization of surface water treatment process
- Four phases of participation and achievement
- Hundreds of filtration plants in US participating
- International version – IWTA -- working in Quebec and Australia – starting up in Nova Scotia

# Partnership and IWTA Accomplishments

- See handout
- KEY: Every Phase III utility has shown noticeable improvement in finished water turbidity and particle removal.
- every utility has protected public health better than when they started!

# QualServe Programs

## Three parts

- Self-assessment
- Peer review
- Benchmarking

## Common Framework

- Business systems
- Business categories
- Best practices

See Handout

# Self-Assessment and Peer Review

## — Self Assessment

- Survey of employees – the “inside” view
- Opinions on best practices at your utility
- Trends provide guidance and direction – not absolutes and solutions

## — Peer Review

- On-site visit by fellow utility professionals
- Not touted as “experts” – but “wear the same boots”
- Present findings before going home

# Participation to Date

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— See handout

# Top Strengths

## — **Top Strengths Indicated by Utility Staff**

- Water Treatment (54%)
- Water Quality
- Health and Safety

## — **Top Strengths Indicated by Peer Reviewers**

- Leadership & Organization (56 times)
- Finance and Fiscal Management
- Water Resources

# Top Opportunities

## — **Top Opportunities Indicated by Utility Staff**

- Continuous Improvement (58%)
- Emergency Planning and Response
- Human Resources Management

## — **Top Opportunities Indicated by Peer Reviewers**

- Human Resources Management (56)
- Leadership & Organization
- Information Management

# Benchmarking

- Two-year development process with founding members, volunteers (see AWWARF report)
- Teamed with American Productivity and Quality Center (APQC)
- Original plan to build a “clearinghouse”
- Initial participation levels dictated scaling back

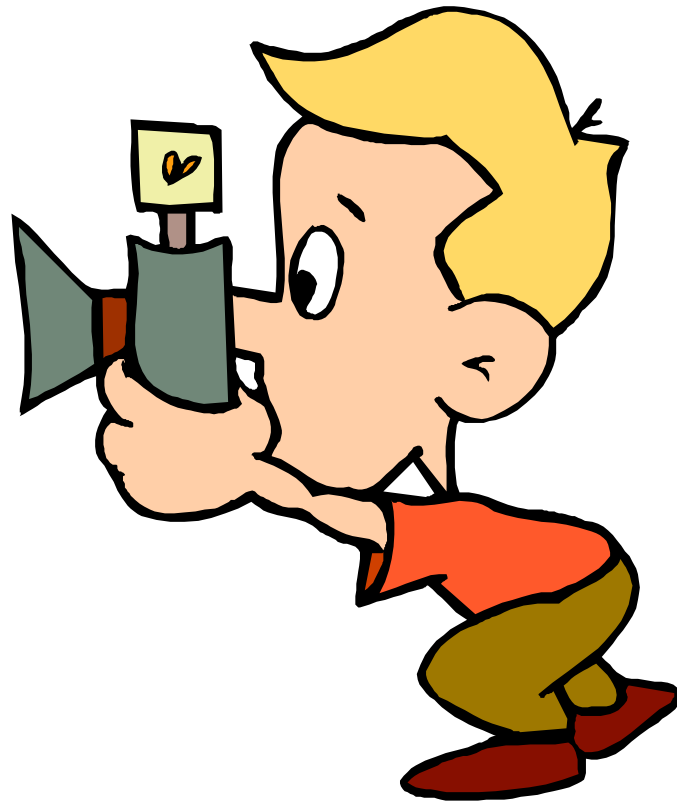
## Benchmarking so far .....

- Common definitions of performance indicators
- Protocols for studies
- Code of conduct for organizations
- Workshops in 2002 identified 22 high level indicators
- Pilot survey completed by 35 utilities

## **Performance indicators survey**

- Pilot report completed March 2003
- Survey and report revised
- 65 utilities supported program in 2003
- 45-50 entering data for 2003 report
- 2004 focus on survey and report

It's like taking a picture.....



# Tying it all together

- **QualServe give inside view, outside view, and global view of where you are and where you might go – and it's a repeatable process – utility drives the bus**
- **Partnership/IWTA are specific to one critical piece of the public health protection game – could be a model for other “super optimization” programs**
- **Accreditation is work in progress that will give utilities standards of performance and a vehicle for recognition – links to other AWWA utility quality programs and other programs still being explored**

# Tools to help you reach your goals



## Three Keys -- In the absence of “gotta do”

- Willingness to ***look*** closely at what you do
- Willingness to ***change*** the way you do things
- Willingness to ***measure*** your results and ***repeat*** the drill

# Keys to Widespread Utility Participation

- Needs to be a *champion at the top*
- Needs to be *important to the utility* and *the community* it serves, especially in the eyes of governance and general public
- Utility needs to be *recognized and edified*